

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A hydrogen generator comprising:
  - a reformer configured to reform a material using steam supplied from a evaporator that evaporates water supplied from a water supply portion into the steam, to generate a reformed gas containing hydrogen as a major component;
  - a material flow passage through which the steam and the material are supplied to the reformer;
  - a shifter configured to shift carbon monoxide contained in the reformed gas into carbon dioxide by a shift reaction;
  - a reformed gas flow passage through which the reformed gas is sent to the shifter;
  - a shifted gas flow passage through which the shifted gas from the shifter flows; and
  - a combustor configured to heat the reformer using a combustion gas, wherein:
    - the reformed gas flow passage and the evaporator are configured to conduct heat exchange between them,
    - a part of heat of the reformed gas flowing through the reformed gas flow passage is used to generate the steam in the

evaporator by the heat exchange to allow the reformed gas to be cooled, and

radiation heat from the shifter is transferred to the evaporator through the reformed gas flow passage and used to generate the steam in the evaporator.

the evaporator comprises a first evaporator and a second evaporator, the first evaporator is configured to evaporate water supplied from a first water supply portion into first steam by the combustion gas derived from the combustor and/or radiation heat of the reformer, and the second evaporator is configured to conduct heat exchange with the reformed gas flow passage, and to evaporate water supplied from a second water supply portion into second steam by using heat of the reformed gas which is recovered by the heat exchange with the reformed gas flow passage, and

the material flow passage includes a first steam flow passage through which the first steam and the material are supplied to the reformer and a second steam flow passage through which the second steam is supplied to the reformer.

2. (Canceled).

3. (Currently Amended) The hydrogen generator according to claim 2 1, wherein the second steam flow passage is connected to

the first steam flow passage at a location upstream of the reformer in gas flow.

4. (Currently Amended) The hydrogen generator according to claim 2 1, wherein the second evaporator is located above the shifter, and a water evaporation surface of the second evaporator is substantially horizontal.

5. (Currently Amended) The hydrogen generator according to Claim 2 1, wherein the second steam flow passage and the shifted gas flow passage are configured to exchange heat between them to allow the second steam to recover at least a part of the heat from the shifted gas.

6. (Original) The hydrogen generator according to claim 3, having a body internally structured such that:

a plurality of axial walls are arranged concentrically to be spaced a predetermined distance apart from one another and a plurality of radial walls are provided at predetermined end portions of the axial walls so as to cross the axial walls to define the material flow passage, the reformed gas flow passage, the shifted gas flow passage, a combustion gas flow passage, and the first and second evaporators, the reformer extending along a

center axis of the body, and the shifter being formed at a location in an axial direction of the reformer,

the first evaporator is disposed to allow at least one of heat exchange with the combustion gas flow passage and use of radiation heat from the reformer,

the first steam flow passage of the material flow passage is disposed to enclose an outer periphery of the reformer in such a manner that one end of the first steam flow passage is fluidically connected to the first evaporator, and an opposite end thereof is fluidically connected to one end face of the reformer in the axial direction corresponding to an upstream face of the reformer in gas flow,

the reformed gas flow passage is disposed so as to enclose the outer periphery of the reformer in such a manner that one end thereof is fluidically connected to an opposite face of the reformer in the axial direction corresponding to a downstream face of the reformer in gas flow and an opposite end thereof is disposed along and fluidically connected to one end face of the shifter in the axial direction corresponding to an upstream face of the shifter in gas flow, and the shifter is disposed to be opposed to the upstream face of the reformer in the axial direction,

the shifted gas flow passage is configured such that one end thereof is fluidically connected to an opposite end face of the shifter corresponding to a downstream face of the shifter in gas flow,

the second evaporator is disposed adjacent the rearmed gas flow passage extending along the upstream face of the shifter, and

the second steam flow passage is configured such that one end thereof is fluidically connected to the second evaporator and an opposite end thereof is fluidically connected the upstream face of the reformer.

7. (Currently Amended) The hydrogen generator according to claim 2 1, further comprising:

a temperature detector configured to detect temperature of the shifter, wherein, based on temperature of the shifter which is detected by the temperature detector, an amount of the water supplied from the second water supply portion to the second evaporator is adjusted.

8. (Currently Amended) The hydrogen generator according to claim 2 1, wherein the water supplied from the first water supply portion to the first evaporator is more in amount than the water

supplied from the second water supply portion to the second evaporator.

9. (Currently Amended) The hydrogen generator according to claim 2 1, wherein the second water supply portion configured to supply the water to the second evaporator includes a water supply unit and a supply pipe that leads the water supplied from the water supply unit to the second evaporator, and

a distance between a water outlet of the supply pipe and the water evaporation surface of the second evaporator is a distance at which a water droplet formed at the water outlet comes in contact with the water evaporation surface before the water droplet drops.

10. (Original) The hydrogen generator according to claim 9, wherein the water outlet has a hole diameter of not less than 0.5 mm and not more than 5 nm.

11. (Original) The hydrogen generator according to claim 9, wherein the water outlet has a flow cross-sectional area of not less than 0.7 mm<sup>2</sup> and not more than 20 mm<sup>2</sup>.

12. (Original) The hydrogen generator according to claim 11, wherein an amount of the water supplied from the water supply unit is not less than 0.1 g/minute and not more than 2 g/minute.

13. (Original) The hydrogen generator according to claim 9, wherein the supply pipe has a flow cross-sectional area that gradually decreases toward the water outlet.

14. (Original) The hydrogen generator according to claim 9, wherein an edge portion of a pipe wall of the supply pipe forming the water outlet is not on a horizontal plane.

15. (Original) The hydrogen generator according to claim 14, wherein a tip end portion of the supply pipe including the water outlet has a cut out.

16. (Original) The hydrogen generator according to claim 9, wherein the tip end portion of the supply pipe including the water outlet is provided perpendicular to the water evaporation surface.

17. (Original) The hydrogen generator according to claim 9, wherein the tip end portion of the supply pipe including the

water outlet is provided in parallel with the water evaporation surface.

18-20. (Canceled).

21. (Currently Amended) A fuel cell power generation system comprising:

a the hydrogen generator according to claim 1 including:

~~a reformer configured to reform a material using steam supplied from a evaporator that evaporates water supplied from a water supply portion into the steam, to generate a reformed gas containing hydrogen as a major component;~~

~~a material flow passage through which the steam and the material are supplied to the reformer;~~

~~a shifter configured to shift carbon monoxide contained in the reformed gas into carbon dioxide by a shift reaction;~~

~~a reformed gas flow passage through which the reformed gas is sent to the shifter;~~

~~a shifted gas flow passage through which the shifted gas from the shifter flows; and~~

~~a combustor configured to heat the reformer using a combustion gas, wherein~~

the reformed gas flow passage and the evaporator are configured to conduct heat exchange between them, a part of heat of the reformed gas flowing through the reformed gas flow passage is used to generate the steam in the evaporator by the heat exchange to allow the reformed gas to be cooled, and radiation heat from the shifter is transferred to the evaporator through the reformed gas flow passage and used to generate the steam in the evaporator; and a fuel cell configured to generate an electric power by using a fuel gas containing hydrogen as a major component and an oxidizing gas, the fuel gas being supplied from the hydrogen generator.